

success. This species was obtained at light on the fen, at Stalham, Hoveton, entrance of S. Walsham Dyke (type and var. *sinelinea*), Horsey Cut, and Horning Ferry.

At Horning Ferry, on the night of August 11th, we sugared some of the alders in the lane. Nothing at all save *Crambus pascuellus* was to be found in the marsh at the sides. Nothing interesting was flying in the lane, except *Plusia festucae*, at flowers of *Eupatorium cannabinum*. But every patch of sugar was packed with moths. Even *N. brevilinea* could not resist the temptation, while *Noctua rubi*, *Apamea secalis* (*didyma*), and others swarmed, and *Apamea leucostigma* var. *fibrosa*, and many other species were exceedingly abundant.

Why are moths melanic in Norwich? We were shown by the Rev. A. Dalby specimens taken in Old Catton of *Boarmia geminaria* and *Eupithecia rectangulata*, both of which were black, and of *Cidaria immanata* or *truncata*, which were as dark and unicolorously dull as some specimens we have from the extreme north of Scotland.

Pupæ and fullgrown larvæ of *Gortyna ochracea* were found in stems of *Carduus palustris* in various parts of the Broads in the first week in August. They were particularly abundant at the south end of Heigham Sound.

In 1909 *Hydroecia crinanensis* was abundant on the border near New Castletown in early September. This year all efforts to find it on September 9th, 10th and 11th, resulted in failure. The thistles were no longer in flower. In 1909 this species frequented *Carduus palustris* in numbers, and more rarely *C. arvensis* and scabious.

Anchocelis litura.—One at sugar, September 6th, Fairhill.

Tiliacea citrago.—Abundant at sugared lime trees from August 21st onwards. Occasionally at light. The ♂s are out many days before the ♀s.

On September 30th, in a howling gale on a cold night, we took one *Xanthia aurago* at ivy blossom at Fairhill. The species also occurred once last year.

Aporophyla lutulenta occurred at Fairhill on September 12th (one), 21st (two ♂s), and 29th (one ♀). The first was taken indoors, the others at ivy-blossom.

Hadena protea was abundant and variable at sugar at Fairhill, commencing on September 1st. It occasionally comes to light. Not one specimen was taken in 1910.

A specimen of *Acidalia virgularia* came to light on September 5th. This is surely a late date though probably *Acidalia* hatch whenever they are ready, and do not wait for times and seasons.

A Season's Collecting at Constantinople in 1911.

By P. P. GRAVES, F.E.S.

During the past six months I was able to do a certain amount of collecting in the vicinity of Constantinople. I should have liked to have had more time at my disposal, and also to have paid more visits, however short, to Ismid, Yalova, on the south side of the Sea of Marmora, and Brusa with its marshes and great isolated mountain, the Mysian Olympus or Keshish Dagh. But my work prevented me from getting away, and the outbreak of cholera in August and September greatly restricted my collecting.

I propose to begin my account of the season's work by describing the areas of the Constantinople district which I actually worked. By the Constantinople district I mean the two necks of land, separated by the Bosphorus, and bounded by the Black Sea on the north and on the south by the Sea of Marmora, extending from the Tchataldja lines in the west to the town of Ismid on the east. Of this area much is still wooded, though large portions have been stripped of trees and are either bare or covered with oak and thorn scrub. The Belgrade Forest behind Therapia on the European side of the Upper Bosphorus is the largest wood in the near neighbourhood of Constantinople. On the Asiatic side there is one considerable forest, the Alem Dagh wood, which covers some 40 square miles all told, and several minor preserves and covers, but the south side of the Asiatic peninsula is terribly bare of wood, having been cleared during the last 50 years. The commonest trees are oak (*Quercus robur* and *Q. cerris*), ilex, chestnut, lime, and beech in the order given; wild cherry trees are not infrequent, plane, willow and poplar, abundant near water in the neighbourhood of villages, cypress in gardens and cemeteries, elm less frequently, and pine only on the Prince's islands, and on a few hilltops, and apparently planted in some coverts behind Beikos on the Asiatic shore of the Bosphorus. Myrtle, a small-leaved bay, arbutus, tree heather, blackberry, broom and buckthorn, blackthorn and hawthorn, form the undergrowth, which is often distressingly thick in the woods and bushy valleys, with here and there *Paliurus* thorn, and any quantity of *Rubus* and wild rose. As a general rule the vegetation has a fairly northern air. There are, however, some warm valleys, e.g., the Djenderé valley, branching off from the Valley of the Sweet waters of Europe (Kiat-hané), which have a decidedly Mediterranean aspect, where heather, broom and cistus, with abundance of aromatic plants, above all thyme and lavender, flourish. The soil is clay or sandstone, with a few limestone outcrops in the neighbourhood of the capital. I have seen what appeared to be a cretaceous rock on the way to Ismid. There are no marshes near the Bosphorus, except the saltmarsh at the mouth of the Tchekmedjé lakes, but there is a great marsh at Ismid where I hope to take *Chrysophanus rutilus* another year. As a rule the hillsides, when stripped, are rather unproductive, mere windy downs, much grazed by sheep and cattle. The hills behind Erenkeui on the Asiatic side of the Marmora are, when stripped of trees, very barren and covered only with a dismal-looking brownish-green vegetation, composed partly of a thorny plant, which replaces heather in Syria, and which is commonly called "geven." In most of the valleys there are brooks, temporary or perennial, which, with the draught from the Black Sea, keep vegetation fresh till late in the year. As far as I can learn the average temperature during the summer is higher on the Asiatic side of the Bosphorus than on the European, but decidedly lower than that of Naples, which is in almost the exact latitude of Constantinople, but once one "turns the corner" and passes Scutari going east along the coast, the average maxima and minima increase. In other words, the further you go from the Bosphorus draught the more "continental" the climate becomes.

To turn to my collecting this year, two points struck me rather forcibly, firstly, the very western appearance of many of the butterflies I took; secondly, the apparent rarity of certain species which one

expects to take in south-eastern Europe and north-western Asia Minor. Of these I may note *Pontia (Synchlœ) callidice* (one ♂ only) and *Pararge maera*, of which I have only one ♀ out of three or four examples seen. Of *Chilades trochilus* and *Tarucus balkanica*, I have only single specimens, neither in good condition. I may have overlooked *Gegenes nostradamus*, of which I took a pair only in very moderate condition on September 3rd. *Melitaea phoebe* appeared to be rare, and I only took four specimens, only one of which is undamaged. Of *Aglais urticae* I took none, and saw but one hibernated specimen in April. It is, of course, possible that I missed finding good localities for some of these insects, or that the year was an unfavourable one for them. As for the frequency of butterflies I cannot say that I ever found the swarms of insects which I have seen in Switzerland and in one or two favoured Syrian localities, but there were two or three localities, the Djenderé valley, near the Sweet Waters of Europe, the outskirts of the Belgrade Forest, between Büyük-deré and the Baghtché-keui aqueduct, and parts of the Gyök-su valley, also called the Sweet Waters of Asia, which always gave me a very good bag. I never had time to visit the Alem-Dagh forest, and on my only journey to Ismid I had no time for collecting, though I saw a good many insects from the train on the shores of the Ismid Gulf. I made close observations of the habits and of the times of emergence of certain species, and am quite positive that certain butterflies are triple-brooded in this district, e.g., *Papilio machaon*, *Pieris napi*, *Leptidid sinapis*, *Loweia dorilis*, *Aricia anteros*, and *Hesperia alveus*. *P. machaon* was first taken by me on April 28th, and occurred not uncommonly, though worn as a rule, till the end of May. On June 15th and on subsequent days, I took fresh ♂s, and later, ♀s, of a larger and yellower brood, often reaching 84mm. in total expanse, which persisted till mid-August, though it was then very worn indeed. On August 19th I took a fresh male of a third brood which was still out on October 7th. I may remark that the specimens which I took in early May were mostly rather worn, and gave me the impression that they had been some time on the wing. *L. dorilis* was first taken by me on May 5th. A fresh emergence took place at the end of June, and I caught fresh specimens in September, one perfect male as late as October 7th. *A. anteros* was often worn by mid-May, abundant and fresh from the beginning of July to mid-August, and in mid-September fresh males were again out. My records for *H. alveus* extend from May 12th-June 6th (first brood), and July 8th-October 7th, on which later date I got a good short series of perfectly fresh specimens. In the case of *H. alveus*, however, I am not altogether sure if I have one species or two in my series of some 30 specimens. I need not speak of the triple—or many—broodedness of species such as *P. icarus*, *Rumiccia phlaeas*, *Pontia daplidice* and the common whites, not to mention *Colias edusa*, which here as in Egypt has a spring, a summer and an autumn brood, occurring in April and May, late June and July, and late August to early November.

Of the different species of the *Urbicolidae* which I took, twelve in number all told, *Nisoniades tages*, *Hesperia malvae*, and *Heteropterus morpheus* were rare, especially the latter, which I only found between Büyük-deré and the Baghtché-keui aqueduct in wood clearings at the end of June. It was not in good condition, and I only took three of half a dozen specimens seen. My two *G. nostradamus* were taken in

the dry bed of a stream at Djenderé. *Hesperia sidae*, a very fine skipper, appeared to be confined to that locality, where it haunted the slopes above the stream in May and June, occasionally flying wildly round in circles, and always going away like a flash when disturbed. I only took one female out of some 24 specimens. The specimens varied little *inter se*, save in the colour of the bands on the underside of the posterior wings, which varied from pale ochre to rich orange. Can Mr. Harold Powell kindly tell me what its foodplant is? *Adopaea flava* was large and abundant; *Thymelicus actaeon* was more local, but common where it occurred, and *Angiades sylvanus* was common in woods and bushy places, the females being larger than is the case at home. *Erynnis alceae* occurred nearly everywhere, but as a rule in small numbers. *E. althaeae* was more local, but more frequent where it did occur. *Powellia orbifer* was unquestionably the commonest "skipper," especially in its first brood, though there seemed to be a great disproportion in the numbers of the sexes, the females, though I hunted for them assiduously, occurring in the proportion of 1 to 5. I may have missed other species of this and other groups, owing to my having failed to visit the excellent Gyök-su localities before July, but I shall endeavour to work them in May and June next year. I failed to find two species which I rather expected to take, *viz.*, *E. lavaterae* and *Muschampia proto*. *Urbicola comma* does not appear to occur here, but I did not expect it at so low a level so far south. In Syria (Lebanon) you must not look for *U. comma* at a lower altitude than 4,000 feet.

(To be continued.)

Some more Considerations about Descriptions and Figures.

By OSCAR JOHN (O. Ion of St. Petersburg.)

Monsieur Charles Oberthür's proclamation to all lepidopterologists to adopt, at the next Entomological Congress, as a law, the principle that "no description should be valid without a good figure," has induced Dr. T. A. Chapman and Mr. L. B. Prout to offer some considerations,* which bear on the point, but which I shall not discuss, that M. Oberthür's rather radical propositions should be well considered before the Congress assembles. The question raised is most certainly of a very serious kind, and strict rules for new descriptions will, I am sure, be welcomed by every serious student. I may be permitted to suggest a few points, which might be taken into consideration before definitely adopting any rules for descriptions of lepidoptera.

We must agree with M. Oberthür, that many descriptions without figures have led, and continue to lead, to misunderstandings, so that often the only means of identifying such doubtful species is the comparison with the types, and when these are lost, every attempt to unravel such questions has to be dismissed as hopeless. Such descriptions being in fact *nomina nuda* might well be left aside without any loss to lepidopterology, but it is absolutely necessary that such *nomina nuda* should not be created in future. To avoid this the following considerations, for which I do not claim originality, might be of importance.

* *The Ent. Record*, pp. 239 and 263.